

From Page No. 43

7 cutters → my primers made what I  
had ordered but IT frame shifted  
everything!

Ordered a new PCR primer

Genentech, Inc. Genentech, Inc.					
SYNTHETIC DNA REQUEST (A-7702)✓					
PROLOGIST WILL BAUM	EXTENSION 2650	LAB NO. 10231	PROJECT NAME OR NUMBER 1713	DATE RECEIVED	DATE SHIPPED
LAST SEQUENCE(S) 5' & 3' & NOTE AS SUCH					
SIZE & FRAGMENT NAME:					
PLEASE INDICATE BY "X" FRAGMENT(S) TO BE CLONED					
1x 37 new					
WB-1					
⑤ 5' GTA·CGG·TGA·CCG·CGG·TCG·GGC·					
TCC·CCT·CGG·GCT·T·3					
Tyro P28					
FRAGMENT USE: <input type="checkbox"/> PRIMER <input type="checkbox"/> PROBE <input type="checkbox"/> PCR <input checked="" type="checkbox"/> GENE CONSTRUCTION <input type="checkbox"/> LINKER/ADAPTOR					
<input type="checkbox"/> MUTAGENESIS <input type="checkbox"/> OTHER (SPECIFY):					
SPECIAL REQUESTS:					
WILL BAUM					
Mark Thum					
3-24-93					

~~Need to set up for Northern analysis on  
Melanie Mark's cell line & tissue northern  
for probe~~

~~RD 5µl pGEM-3Z (w/ 600 bp HRTK6 5')~~  
~~2µl 10x 1A~~  
~~1µl Sac I~~  
~~12µl H<sub>2</sub>O~~  
~~20~~

Inc 37°C O/N.

To Page No.

Witnessed &amp; Understood by me,

Date

Invented by

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From Page No. 47

Picked up primer to make new fusion  
construct of HPTK6

Ran PCR as on p. 17 o/w.  
used Tyro P13 & Tyro P28 (new)

To Page 1

Witnessed &amp; Understood by me,

Date

Invented by

Recorded by

W. W. Baron

Date

From Page No. 51

Did magic PCR prep on o/n FMS PCR

Digested w/ Arr II & Bst E II

Clean-up done

Did 3 part ligation w/ 5' insert & SK<sup>+</sup>/CH2CH<sup>+</sup>  
12.5°C o/n.  
(= 3 ligs)  
(Hi/Lo conc  
& vect alone)

To Page No.

Witnessed &amp; Understood by me,

Date

Invented by

Recorded by

Will Baron

Date



TITLE \_\_\_\_\_

Book No. 17

Exhibit D, pg. 4 of 28

From Page No. 52

Transformed O/N SK<sup>+</sup>/CH<sub>2</sub>CH<sub>3</sub>/14PTK6 FUS  
ligations into competent E. coli

Plated each onto 5x100mm LB can't 50 plate,  
(control onto 1 plate)

Inc. all (11) 37°C O/N.

To Page

Witnessed &amp; Understood by me,

Date

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m Page No. 53

Checked O/N FUS transformation plates

Got 19 colonies

Started 19 x 5ml LB cant<sup>ESD</sup> MP's + master

Inc all 37°C O/N.

To Page No. 54

Witnessed &amp; Understood by me,

Date

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Recorded by

Will Baron

Date

From Page No. 54

(pK0CH2CH3/HPTK6 FUS)

Did Magic MP's on o/n cultures (stored master 4°C)

RD's

Pr rxn

2µl MP DNA

2µl 10x B

0.5µl HindIII

15.5µl H<sub>2</sub>O

20

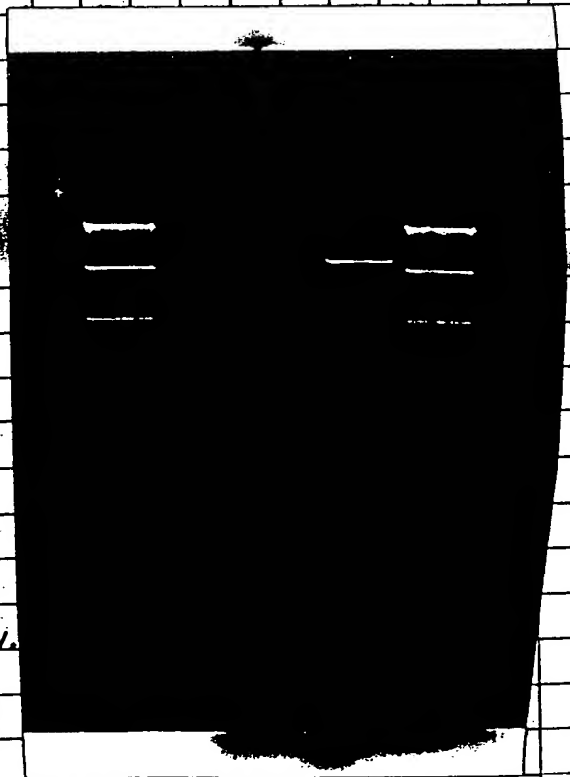
37°C - 1.5 hrs (+ 4µl dye)

Run 15µl each on 0.7% agarose (1x TBE)

No real ones!

Run individual compon  
(of ligation mix)  
on 2% agarose (1x TBE)No vector or 3' PCR  
insert seen.Re - ran PCR as on  
p. 48 o/n

Re did 3 part Ligation o/n.



To Page

Witnessed &amp; Understood by me,

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Date

Page No. 55

transformed new HPTK6/Fus 3' part Lig.  
 Plated onto 11 x 100mm LB cant 50 → Inc 37°C o/n

Extracted o/n PCR  
 as 10µl on 2% agarose (1x TBE)  
 Also ran 10µl of OLD Fus 3' PCR

PCR not working

Must not have worked in  
 15I try either → This is  
 why I didn't get any  
 fusion transformants

17/48  
 Re ran PCR as on p. 17 except  
 I used pRK5/HPTK6 as template  
 (also ran Bsp II w/ Bsp15/21  
 as a ~300bp PCR control)  
 (same conditions as on p 17)

Extracted & ran 20µl each on 2%  
 3:1 Nusieve/6% (1x TBE)

New primer (Tyro P28) appears  
 to be no-good.

To Page No. 5

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Genentech, Inc.  
Genentech, Inc.

## SYNTHETIC DNA REQUEST

A- 7657 ✓

REQUESTOR	EXTENSION	LAB NO.	PROJECT NAME OR NUMBER	DATE RECEIVED	DATE NEEDED
Will Barron	2650	10231	1213		

LIST SEQUENCE(S) 5' → 3' &amp; NOTE AS SUCH

SIZE &amp; FRAGMENT NAME:

PLEASE INDICATE BY "10" FRAGMENT(S) TO BE CLONED

Tyro P28, 37mer

⑤ GTA-CGG-TGA-CCC-CGG-<sup>5</sup>GGG-TGG-GGC  
TCC-CCG-CGG-GCT-T<sup>3'</sup>

(Remake of A29X, wd-1)

Resubmitted P28 for new-synthesis

Witnessed &amp; Understood by me,

Date

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Recorded by

Date

To Page



From Page No. 57

Picked up remade Tyro P28

Re-ran FUS PCR's as previously.

Ran O/N.

To Page 1

Witnessed &amp; Understood by me,

Date

Invented by

Date

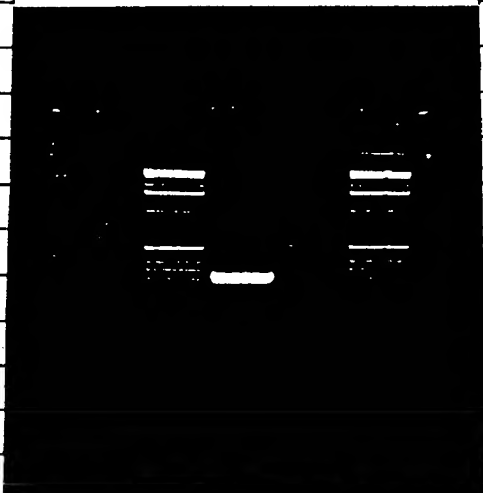
Recorded by

W. M. Barton

From Page No. 58

Extracted O/N PCR's 1x100ul CHCl<sub>3</sub>

Run 20µl each on 2% agarose (1x TBE)



P28 is not working

Try varying the Mg<sup>2+</sup> concRe ran P13/P28 rxns  
using1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 6,  
8, 9 & 10 mM Mg<sup>2+</sup>~~But~~ Also changed conditions to "Touchdown1<sup>st</sup> annealing @ 65°C → ended @ 55°C

2 cycles at each temp → 10 @ 55°C

All 30" 72°C extension

Ran O/N.

To Page

Witnessed &amp; Understood by me,

Date

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W. M. Brown

From Page No. 59

Extracted O/N PCR's 1x 100ul CHCl<sub>3</sub> each  
 Run 20ul each on 2% agarose (1xTBE)

All failed.

The only conclusion  
 I can reach at  
 this time is that  
 there is something  
 weird about  
 primer 28.

Ordered 3 new primers to work up  
 from P28 position.

Genentech, Inc. SANTO DOMINGO, N.M.		SYNTHETIC DNA REQUEST		(A-7726)V	
REQUESTOR WILL BAYON	EXTENSION 2650	LAB NO. 10231	PROJECT NAME OR NUMBER 1713	DATE RECEIVED	DATE DESIGNED
PLEASE INDICATE BY "XXX" FRAGMENT(S) TO BE CLONED					
3x35 mers					
① Tyro P29					
⑤ GTA.CGG.TGA.CCG.CGG.TCG.GGC.TCC.CCT.CGG. . GCT.TG.3' XXX					
② Tyro P30					
⑤ GTA.CGG.TGA.CCG.TCG.GGC.TCC.CCT.CGG. . GCT.TGG.CC.3' XXX					
③ Tyro P31					
⑤ GTA.CGG.TGA.CCG.GGC.TCC.CCT.CGG.GCT. .TGG.CCA.CG.3' XXX					
FRAGMENT USE: <input type="checkbox"/> PRIMER <input type="checkbox"/> PROBE <input type="checkbox"/> PCR <input checked="" type="checkbox"/> GENE CONSTRUCTION <input type="checkbox"/> LINKER/ADAPTOR					
<input type="checkbox"/> MUTAGENESIS <input type="checkbox"/> OTHER (SPECIFY):					
SPECIAL REQUESTS					
APPROVED FOR WILL BAYON		DATE 4/9/93	APPROVED Mark Thayer	DATE 4-12-93	

Witnessed &amp; Understood by me,

Date

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To Page N

From Page No. 60

Picked up new HPTK6 PCR fusion primers

PCR's

Primer sets

1 = P13 / P28

2 = P13 / P29

3 = P13 / P30

4 = P13 / P31

5 = P13 / P14 (cold control)

Per rxn mixed

10  $\mu$ l 10x buffer16  $\mu$ l dNTP's1  $\mu$ l 1<sup>st</sup> primer1  $\mu$ l 2<sup>nd</sup> primer2  $\mu$ l 1:10 PRK5/HPTK6 (~90ng)64  $\mu$ l H<sub>2</sub>O1  $\mu$ l Tag

100

+100  $\mu$ l oil

Ran same conditions as on p. 17 of

Witnessed &amp; Understood by me,

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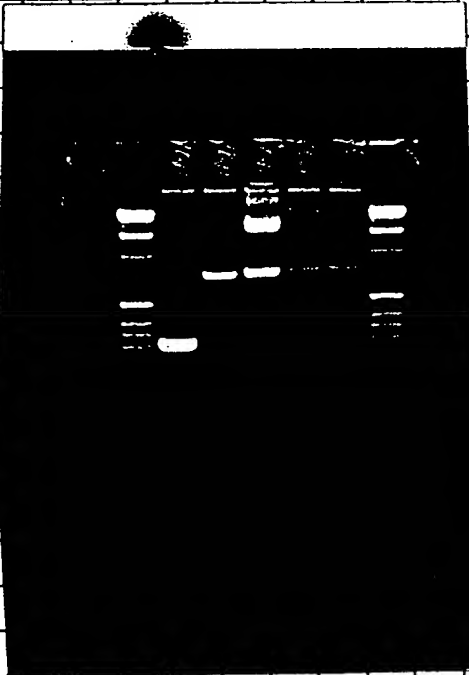
Recorded by

Date

To Pe

from Page No. 61

Extracted o/N PCR's 1x 100ul Cttcl<sub>3</sub> each  
Ran 20ul each on 2% agarose (1x TBE)



This is very frustrating!  
On 4/16 I will re-do  
using various templates

To Page No.

Witnessed &amp; Understood by me,

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W. W. Bacon

Date

From Page No. 62

Want to prepare SacI/stuI frag of PRK5/HPTK  
 Digested & ran on 0.7% agarose (1xTBE)

cut out indicated bands  
 Freeze/squeeze

(-20°C ~ 2 hrs, spin)

3 templates to be used  
 for Fusion PCR  
 will be HPTK6 Insert  
 HPTK6 IRb frag &  
 Hep 3B #6

Ran these 3 templates  
 w/ following primers

13, 28

13, 29

13, 30

13, 31

13, 14 (cont)

different

5' primers

16, 28

16, 29

16, 30

16, 31

16, 14

= 30 rxns total

To Page

Witnessed &amp; Understood by me,

Date

Invented by

Date

Recorded by

Will Bacon

from Page No. 63

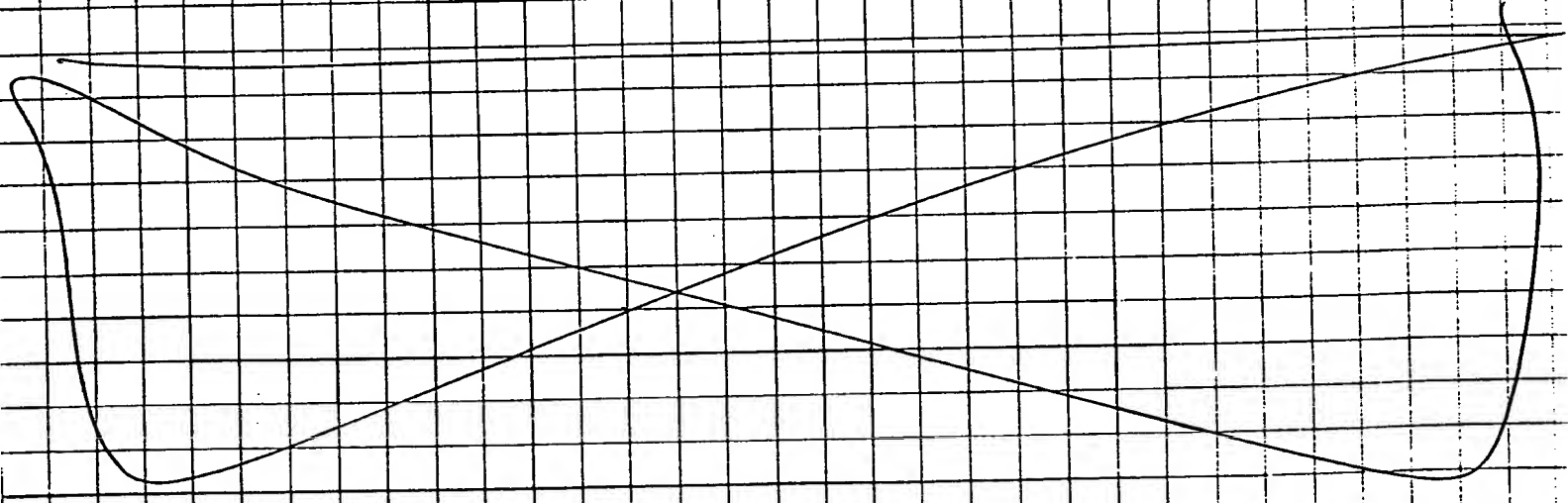
Per rxn mixed

Conditions

10µl 10X buffer  
16µl dNTPs  
1µl 15' primers  
1µl 3rd primers  
1µl diluted template  
70.5µl H<sub>2</sub>O  
0.5µl Tag  
100  
+ 100µl O<sub>2</sub>

94°C	3'	1 cycle
55°C	30"	
72°C	30"	
98°C	30"	4 cycles
55°C	30"	
72°C	30"	
96°C	30"	20 cycles
55°C	30"	
72°C	30" w/ 1 sec auto ext	
72°C	10'	1 cycle
4°C	soak	

Ran + Then stored -20°C until



To Page No.

Witnessed & Understood by me,

Date

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Date



om Page No. 65

Page No. 65  
Did Magic PCR preps on FUS<sup>28</sup> 29, 30 & 31 PCR's (4 total)  
RD'd ~~each of each~~ entire samples  
w/ Avr II & BstEII  
Stored -20°C o/n.

To Page No. 6

**Witnessed & Understood by me,**

**Date**

**Invented by**

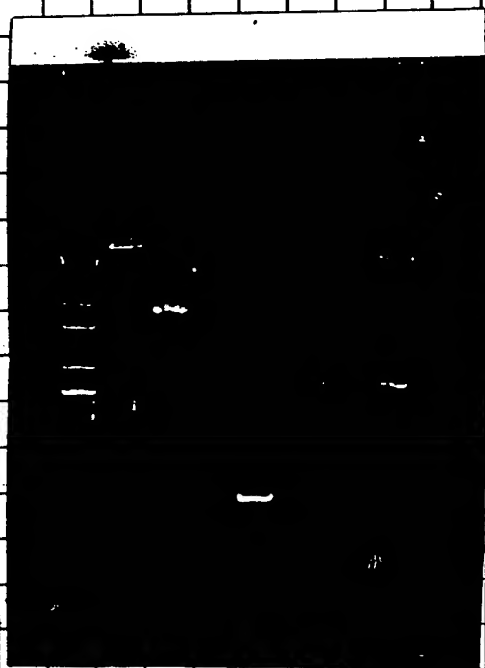
Recorded by

**Dat**

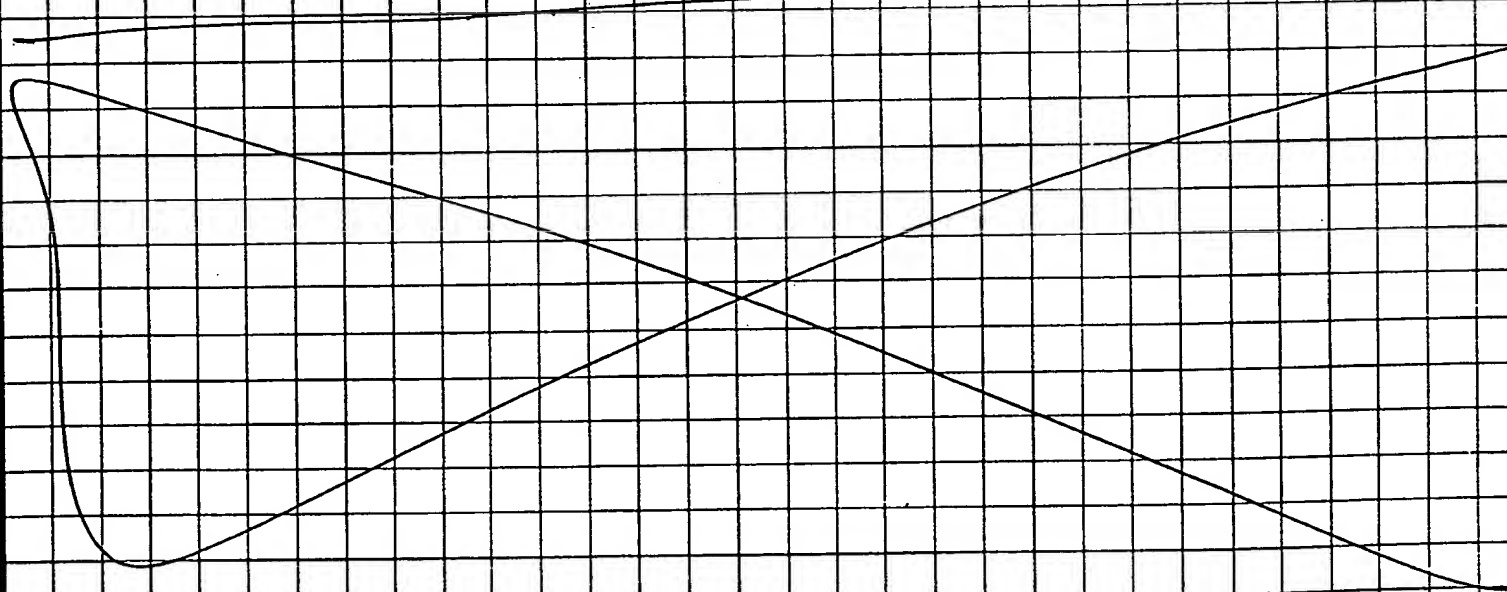
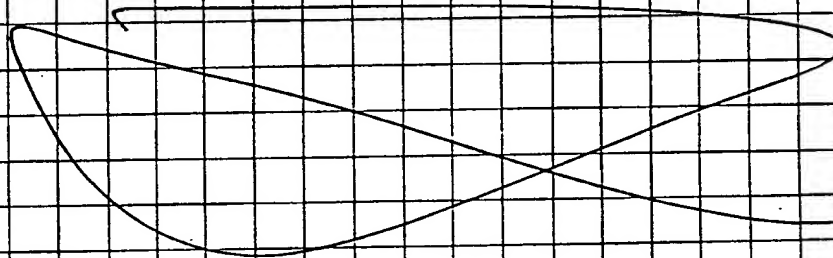
TITLE \_\_\_\_\_

From Page No. 16

Ran digested FUS PCR's on 1% LMP agarose (1x TBE)  
along w/ ~~Avr II~~ Avr II / EcoRI digested 1Hep 3B #6  
BstE II / ~~EcoRI~~ EcoRI digested SK+ / CH2CH3



PCR frags did not digest  
No ~~5'~~ 5' insert is visible  
Re-ran fusion PCR's a  
before → O/N.



To Page

Witnessed & Understood by me, \_\_\_\_\_

Date \_\_\_\_\_

Invented by 11-11-2011

Date \_\_\_\_\_

om Page No. 67

Extracted o/n PCR's  $1 \times 100 \mu\text{l}$   $\text{CHCl}_3$

Run 50% of each (50 $\mu$ l) on 0.8% TBE agarose.

cut out indicated bands

RS'd each in 44 ml TE

Avr II RD's

Person mixed

44  $\mu$ l PCR DNA

5  $\mu$ l 10x NEB #2

1st Arr II

52

Inc  $37^{\circ}\text{C} \sim 1.5\text{h}$  ~~at 37°C~~

Removed 10  $\mu$ l each  $\rightarrow$  Ran on 1% agarose (1x TBE)

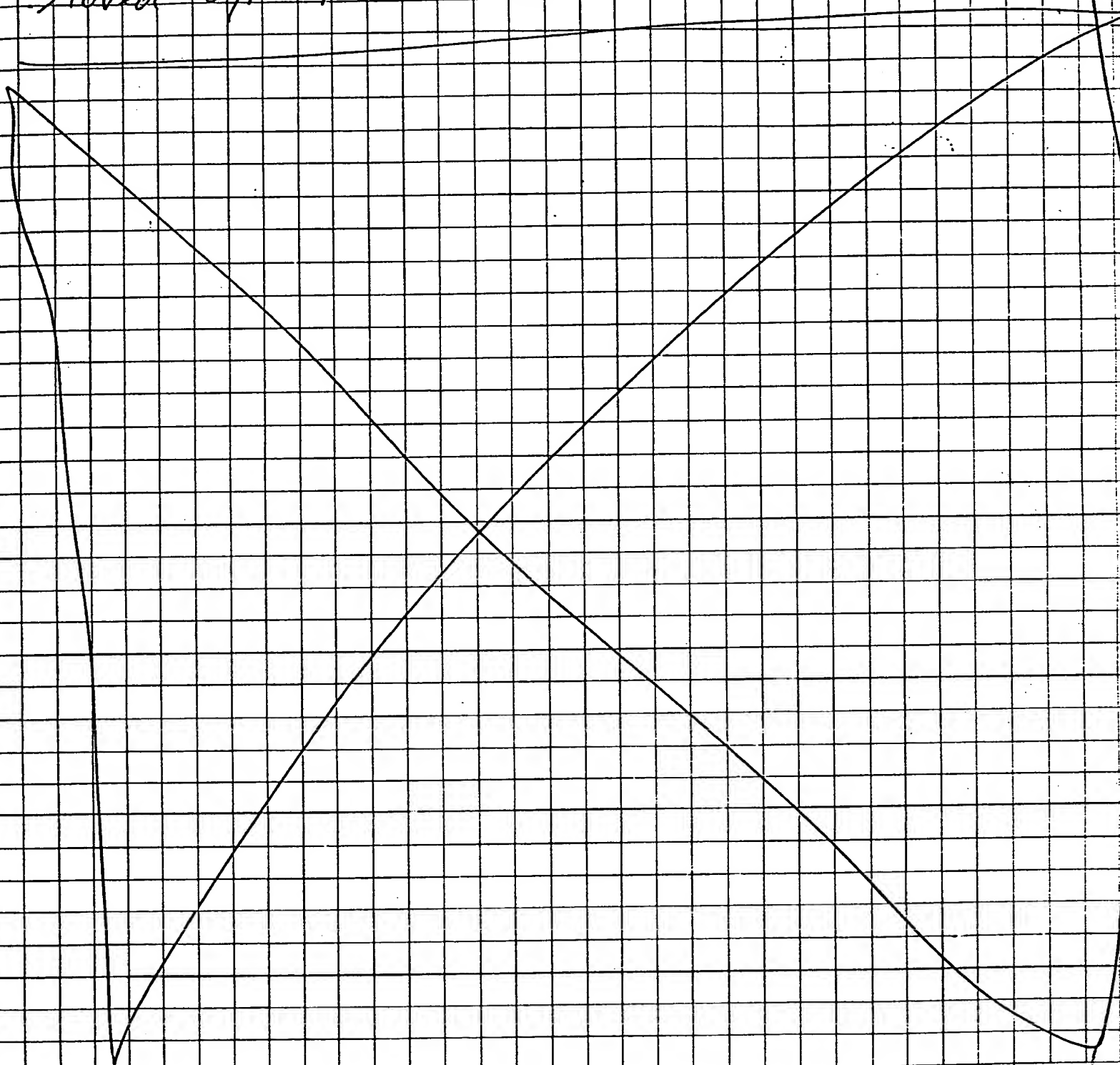
Digest: Successful

Digests: Successful  
Died Magic Clean up's on remaining  
samples

Ran BstEII RD o/n 60°C.

**To Page No.**

Stored O/N RD's -20°C.



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Witnessed & Understood by me,	Date	Invented by	Date
		Recorded by <u>Will Barton</u>	

Page No. 69

an frozen FMS PCR RD's on 1% LMP agarose (1x TBE)  
- Gel not photographed  
isolated ~300 bp bands  
Stored in eppendorf tubes -20°C o/n.

To Page No. 71

ssed &amp; Understood by me,

Date

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Date

TITLE \_\_\_\_\_

Book No. 17

Exhibit D, pg. 21 of 26

From Page No. 20

Did magic PCR preps on frozen FUS 3' pieces  
Recovered each in 50  $\mu$ l TE

(Hi & Lo conc mixed)  
Did 3 part Ligs for FUS 29 & FUS 30 w/ 5' ins  
& EK- / CH2CH3 vect (plus vect alone)  
= 5 Ligations total.

Inc all (5) 12.5°C O/N.

To Page

Witnessed & Understood by me,

Date

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Date

From Page No. 72	#1	29/Hi	29/Lo	30/Hi	30/Lo	Col
	50	14	15	18		40

Checked transformation plates

Started 60 x 5ml LB can<sup>50</sup> MP's + masters

(30 on each FUS 29 & FUS 30)

Inc all 37°C O/N.

To Page No.

Witnessed & Understood by me,

Date

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Recorded by

Date

W. A. Baron



m Page No. 71

Transformed o/n FMS Ligations  
into competent E. coli.

Plated each onto 5x100mm LB can 50 plates  
(plated control onto 2 plate).

Inc all (11) 37°C o/n.

To Page No. 7

Witnessed & Understood by me,

Date

Invented by

Recorded by

W. M. Bacon

Date

From Page No. 73

Ran MP cultures (SK-CH2CH3 / HPTK6 Fusion)  
in Autogen (stored masters 4°C)

Collected each in ~200 µl TE

RD's (60 total)

Per rxn:

5 µl MP DNA  
2 µl 10x B  
0.5 µl HindIII  
1 µl RNase A  
11.5 µl H<sub>2</sub>O

20

Inc 37°C O/N

SAT - moved RD's to -20°C

To Page No. 75

Witnessed &amp; Understood by me,

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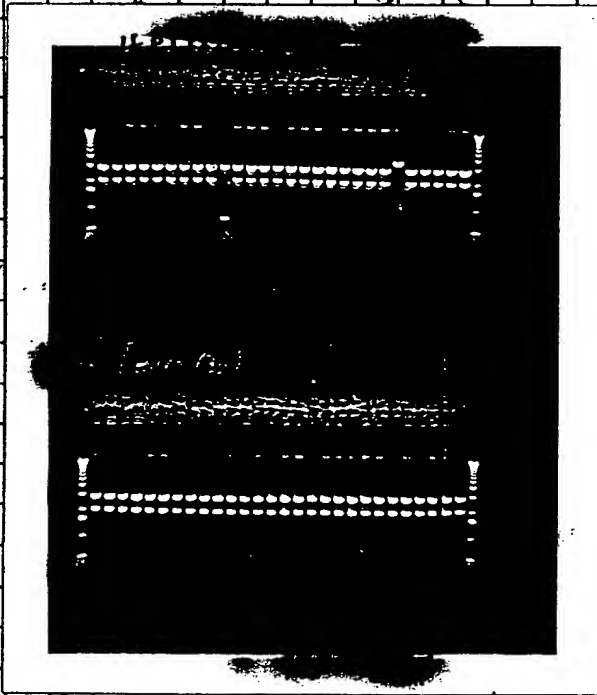
W. M. Brown

Date

TITLE

From Page No. 74

Ran FNS RD's on O.F. against (ix TBE)



only 2 of 56 are negative  
~~Read~~

Did magic clean-ups on  
29 #'s 1, 2, 3, 4, 5, 7, 8 + 9

30 #'s 31, 32, 33, 34, 35, 36, 37,

Collected each in 50ul TE

Denatured 10ul each in 100ul 0.1M NaOH

Neutralized & EtOH ppt'd O/N

To Page No. 7

Witnessed & Understood by me,

Date

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Recorded by

W. W. Bacon

Date

From Page No. 77

Did sequencing runs on FUS 29 (8 templates)  
using CH2 CH3 sequencing <sup>spiking</sup>  
(Used sequenase kit w/ 35S-MATP)  
Dried down samples → stored -20°C O/N.

Poured 2 sequencing gels  
1 wedge + 1 flat  
Stored R.T O/N.

To Page No. 79

Witnessed & Understood by me,

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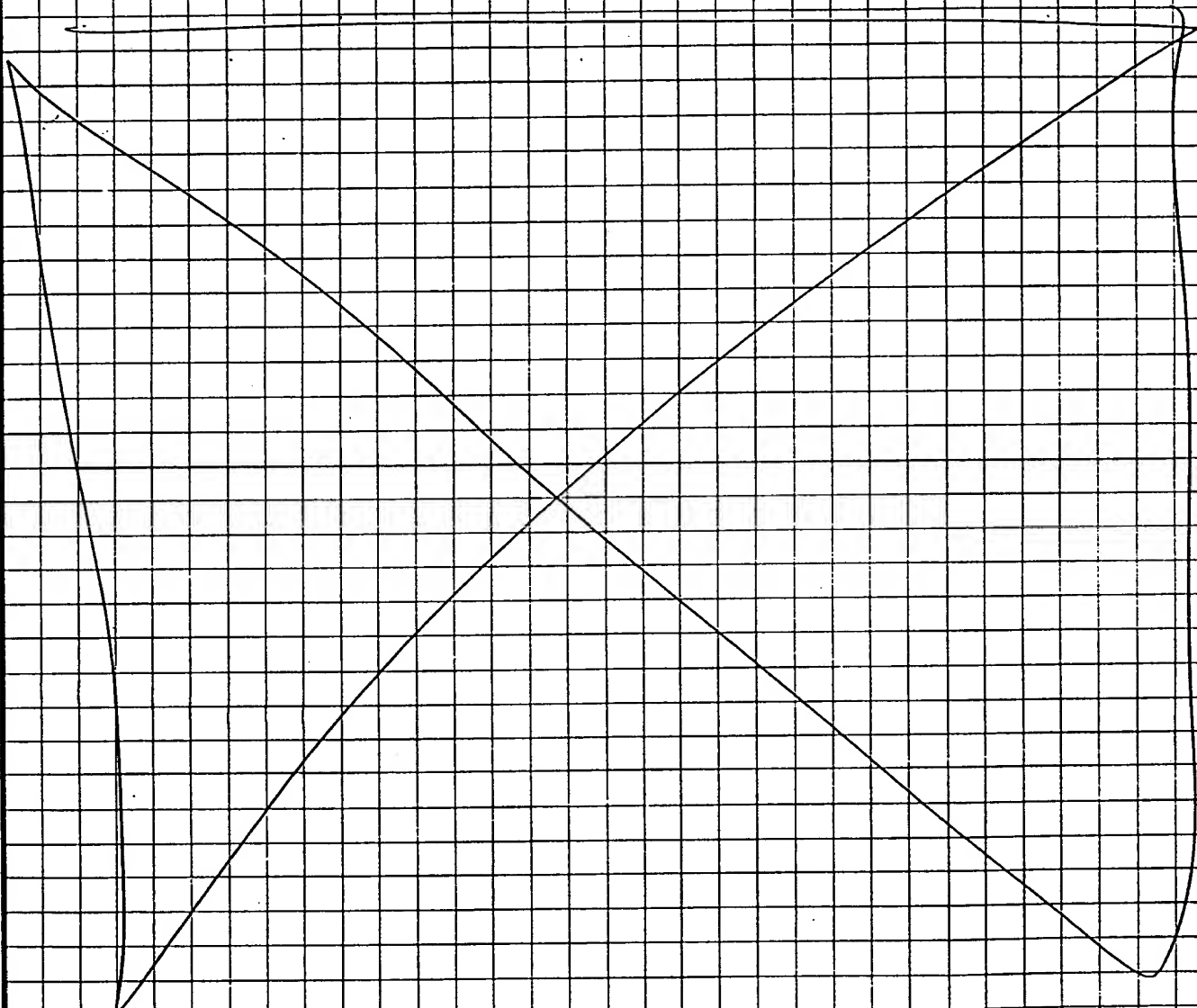
W. M. Bacon

Date

TITLE \_\_\_\_\_

From Page No. 78

Ran sequencing gels on FUS 29/34-CH2CH3  
Dried & A/R'd both RT o/n.



To Page No. 79

Witnessed & Understood by me, \_\_\_\_\_

Date \_\_\_\_\_

Invented by \_\_\_\_\_

Date \_\_\_\_\_

Recorded by \_\_\_\_\_

Will Bacon

[Signature]

From Page No. 79

Developed o/N sequencing A/R.

I have correct sequence for SK-CH2CH3/PUS 29 #1

Ready to subclone to pSV15-ID-LL for  
mammalian expression.

To Page No. 81

Witnessed &amp; Understood by me,

Date

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Date